

CLAIMS

1. A composition for transplantation into a xenogeneic subject comprising an isolated spinal cord cell obtained from a pig, such that treatment of spinal cord damage is obtained upon transplantation into the subject.

2. The composition of claim 1, wherein the pig is an embryonic pig.

3. The composition of claim 2, wherein the spinal cord cell is isolated from an embryonic pig between about days 20 to 30 of gestation.

4. The composition of claim 3, wherein the spinal cord cell is isolated from an embryonic pig between about days 25 to 29 of gestation.

5. The composition of claim 1, wherein the spinal cord cell is an oligodendrocyte.

6. The composition of claim 1, wherein the spinal cord cell is an astrocyte.

7. The composition of claim 1, wherein the spinal cord cell is a neuron.

8. The composition of claim 1, wherein the cell, in unmodified form, has an antigen on the cell surface which is capable of stimulating an immune response against the cell in a xenogeneic subject, wherein the antigen on the cell surface is altered to inhibit rejection of the cell upon introduction of the composition into the subject.

9. The composition of claim 8, wherein the antigen on the cell surface which is altered is an MHC class I antigen.

Sub
C3
B

10. The composition of claim 9, wherein the cell is contacted prior to transplantation into the human with at least one anti-MHC class I antibody or fragment thereof, which binds to the MHC class I antigen on the cell surface but does not activate complement or induce lysis of the cell.

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11. The composition of claim 10, wherein the anti-MHC class I antibody is an anti-MHC class I F(ab')₂ fragment.

12. The composition of claim 11, wherein the anti-MHC class I F(ab')₂ fragment is a F(ab')₂ fragment of a monoclonal antibody PT85.

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13. The composition of claim 1, which further comprises at least one of the agents or factors selected from the group consisting of neurotrophic factors and anti-inflammatory agents.

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14. The composition of claim 13, wherein the neurotrophic factor is selected from the group consisting of brain-derived neurotrophic factor, platelet-derived neurotrophic factor, neural growth factor, ciliary neurotrophic factor, neurotrophin-3, neurotrophin 4/5 and basic fibroblast growth factor.

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15. The composition of claim 13, wherein the anti-inflammatory agent is a steroid.

16. The composition of claim 15, wherein the steroid is methylprednisolone.

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17. The composition of claim 1, wherein the cell is obtained from a pig predetermined to be free from at least one organism selected from the group consisting of zoonotic, cross-placental and neurotropic organisms.

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18. A method of treating a xenogeneic subject having spinal cord damage by administering to the subject a composition comprising an isolated spinal cord cell obtained from a pig, such that treatment of spinal cord damage is obtained upon administration of the composition to the subject.

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19. The method of claim 18, wherein the spinal cord cell is obtained from an embryonic pig.

20. The method of claim 19, wherein the spinal cord cell is isolated from an embryonic pig between about days 20 to 30 of gestation.

21. The method of claim 20, wherein the spinal cord cell is isolated from an embryonic pig between about days 25 to 29 of gestation.

22. The method of claim 18, wherein the spinal cord cell is an oligodendrocyte.

23. The method of claim 18, wherein the spinal cord cell is an astrocyte.

24. The method of claim 18, wherein the spinal cord cell is a neuron.

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25. The method of claim 18, wherein the cell, in unmodified form, has at least one antigen on the cell surface which is capable of stimulating an immune response against the cells in the subject, wherein the antigen on the cell surface is altered to inhibit rejection of the cells when introduced into the subject.

26. The method of claim 25, wherein the cell is contacted prior to introduction into the subject with at least one molecule which binds to at least one antigen on the cell surface which is capable of stimulating an immune response against the cell in the subject to

alter the antigen on the cell surface to inhibit rejection of the cell when introduced into the subject.

27. The method of claim 26, wherein the antigen on the surface of the cell which is altered is an MHC class I antigen.

28. The method of claim 26, wherein the cell is contacted prior to introduction into the subject with at least one anti-MHC class I antibody or fragment thereof, which binds to the MHC class I antigen on the cell surface but does not activate complement or induce lysis of the cell.

29. The method of claim 28, wherein the anti-MHC class I antibody is an anti-MHC class I F(ab')₂ fragment.

30. The method of claim 29, wherein the anti-MHC class I F(ab')₂ fragment is a F(ab')₂ fragment of a monoclonal antibody PT85.

31. The method of claim 18, wherein the composition further comprises at least one of the agents or factors selected from the group consisting of neurotrophic factors and anti-inflammatory agents.

32. The method of claim 31, wherein the neurotrophic factor is selected from the group consisting of brain-derived neurotrophic factor, ciliary neurotrophic factor, platelet-derived growth factor, neural growth factor, neurotrophin-3, neurotrophin 4/5 and basic fibroblast growth factor.

33. The method of claim 31, wherein the anti-inflammatory agent is a steroid.

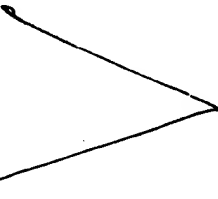
34. The method of claim 33, wherein the steroid is methylprednisolone.

35. The method of claim 18, wherein the xenogeneic subject is a human.

5 *Sub* 36. The method of claim 35, wherein spinal cord damage is spinal cord injury.

Sub B 37. ~~The method of claim 35, wherein the spinal cord damage is a~~
neurodegenerative disorder.

10 38. The method of claim 37, wherein the neurodegenerative disorder is
amyotrophic lateral sclerosis.

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a1* 

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a2* 

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